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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/600,115

06/20/2003

John S. Doleac

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10/20/2006

VERIZON

PATENT MANAGEMENT GROUP

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EXAMINER

FLEURANTIN, JEAN B

ART UNIT

PAPER NUMBER

2162

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/600,115	DOLEAC ET AL.	
	Examiner	Art Unit	
	JEAN B. FLEURANTIN	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to Applicant(s) arguments submitted on 8/09/06.

The following is the current status of claim(s):

Claims 1-27 have been canceled.

Claims 28-66 remains pending for examination.

The Terminal Disclaimer filed on 8/17/06 has been entered and considered.

The document(s) (Power Attorney) submitted on 8/14/06 has(have) been entered and considered.

Response to Applicant' Remarks

Applicant's arguments filed 8/09/06 have been fully considered but they are not persuasive for the following reasons I (rejection maintained and repeated below) and section II (response to argument).

Claim Rejections - 35 USC § 101

- I. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-4, 11-12, 15 and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As set forth in MPEP 2106:

Products may be either machines, manufactures, or compositions of matter.

A *machine* is "a concrete thing, consisting of parts or of certain devices and combinations of devices." *Burr v. Duryee*, 68 U.S. (1 Wall.) 531, 570 (1863).

As per claim 28-36 and 46-54,

Claims 28-36 and 46-54, the method, program and system as recited in the claims, in view of the above cited MPEP section is not statutory, because "providing first switch commands generated by a first system; generating a subset of said first switch commands generated by said first system; providing data used by a second system to generate second switch commands; and determining whether said data used by said second system corresponds to first switch commands included in said subset, wherein a correspondence between said data and said first commands is indicative of the second system being capable of generating at least one second switch command equivalent to first switch command including in said subset" the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994). Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-30, 32, 36-39, 41, 45-48, 50 and 54-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornell et al., US Pat. No. 4,599,490 ("Cornell") in view of Rekieta et al., US Pat. No. 6,230,164 ("Rekieta").

As per claims 28, 37 and 46, Cornell substantially discloses "a method executed in a computer system of verifying generated commands" (i.e., group of commands is exchanged between the telecommunication switch and the telecommunication control complex; see col. 3, lines 50-53), the method comprising:

"providing first switch commands generated by a first system" (i.e., telecommunication switch controller adapted to generate and receive the primitive commands; see col. 4, lines 2-15);

"generating a subset of said first switch commands generated by said first system" (i.e., telecommunication switches being connected to subsets of said pluralities of first communication link; see col. 23, lines 59-65); and

"providing data used by a second system to generate second switch commands" (i.e., second telecommunication switch connects to controller to provide inters witch links (second switch); see col. 17, line 51 to col. 18, line 10). Cornell fails to explicitly disclose determining whether said data used by said second system corresponds to first switch commands included in said subset, wherein a correspondence between said data and said first commands is indicative of the second system being capable of generating at least one second switch command equivalent to first switch command including in said subset. However, Rekieta discloses determining whether said data used by said second system corresponds to first switch commands included in said subset, wherein a correspondence between said data and said first commands is indicative of the second system being capable of generating at least one second switch command equivalent to first switch command including in said subset (see Rekieta col. 4,

lines 38-50). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Cornell with determining whether said data used by said second system corresponds to first switch commands included in said subset, wherein a correspondence between said data and said first commands is indicative of the second system being capable of generating at least one second switch command equivalent to first switch command including in said subset as disclosed by Rekieta (see Rekieta Fig. 1a). Such a modification would allow the teachings of Cornell to improve the accuracy and the reliability of the method for analyzing the quality of telecommunications switch command tables, and to provide an efficient system for modifying the GTTs associated with various subsystems in the AIN (see Rekieta col. 17, lines 54-55).

As per claims 29, 38 and 47, Cornell substantially disclose "the actual commands are successfully executed commands" (i.e., the use of such primitive commands permits any modern program-controlled telecommunication switch to be readily adapted to communicate in a standard way with and to be responsive to commands from a telecommunication control complex; see col. 3, lines 54-59).

As per claims 30, 39 and 48, the limitations of claims 30, 39 and 48 are rejected in the analysis of claim 1, and these claims are rejected on that basis.

As per claims 32, 41 and 50, in addition to claim 1, Cornell further discloses "determining a list of switch identifiers" (i.e., an identity code associated with a telecommunication unit from the telecommunication network; see col. 2, lines 63-66). Cornell fails to explicitly disclose said second system into at least one hash table. However, Rekieta discloses said second system into at least one hash table (see Rekieta col. 9, lines 34-36). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Cornell with said second system into at least one hash table as disclosed by Rekieta (see Rekieta Fig. 2). Such a modification would allow the teachings of

Cornell to improve the accuracy and the reliability of the method for analyzing the quality of telecommunications switch command tables, and to provide an efficient system for modifying the GTTs associated with various subsystems in the AIN (see Rekieta col. 17, lines 54-55).

As per claims 36, 45 and 54, Cornell discloses "said data used by said second system are stored in a database used by said second system, and wherein said data include at least one command parameters and programs used to generate second switch commands" (see col. 17, line 51 to col. 18, line 6).

As per claims 55, 59 and 63, Cornell substantially discloses "a method of verifying switch commands for telecommunication network" (i.e., group of commands is exchanged between the telecommunication switch and the telecommunication control complex; see col. 3, lines 50-53), the method comprising:

"obtaining from a first system executable switch commands for telecommunications network" (i.e., telecommunication switch controller adapted to generate and receive the primitive commands; see col. 4, lines 2-15);

"providing data used by a second system to generate second executable switch commands for the telecommunications network" (i.e., second telecommunication switch connects to controller to provide interswitch links (second switch); see col. 17, line 51 to col. 18, line 10); and

"comparing the first executable switch commands with the data used by the second system" (i.e., telecommunication switches being connected to subsets of said pluralities of second communication link; see col. 23, lines 59-65). Cornell fails to explicitly disclose based on the match between a first executable switch commands and the data used by the second system, identifying the matched first executable command as being coded by data used by the second system to generate a second executable switch command telecommunication network. However, Rekieta discloses based on the match between a first executable switch commands and the data used by the second system, identifying the matched first

executable command as being coded by data used by the second system to generate a second executable switch command telecommunication network (see Rekieta col. 4, lines 38-50). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Cornell with based on the match between a first executable switch commands and the data used by the second system, identifying the matched first executable command as being coded by data used by the second system to generate a second executable switch command telecommunication network as disclosed by Rekieta (see Rekieta Fig. 1a). Such a modification would allow the teachings of Cornell to improve the accuracy and the reliability of the method for analyzing the quality of telecommunications switch command tables, and to provide an efficient system for modifying the GTTs associated with various subsystems in the AIN (see Rekieta col. 17, lines 54-55).

As per claims 56, 60 and 64, in addition to claim 1, Cornell further discloses "means for recording at least one portion of the first executable switch commands in a log file, the at least one portion based on the switch type" (see col. 22, lines 45-54). Cornell fails to explicitly disclose said a hash table. However, Rekieta discloses a hash table (see Rekieta col. 9, lines 34-36). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Cornell with a hash table as disclosed by Rekieta (see Rekieta Fig. 2). Such a modification would allow the teachings of Cornell to improve the accuracy and the reliability of the method for analyzing the quality of telecommunications switch command tables, and to provide an efficient system for modifying the GTTs associated with various subsystems in the AIN (see Rekieta col. 17, lines 54-55).

As per claims 57, 61 and 65, the limitations of claims 57, 61 and 65 are rejected in the analysis of claims 1 and 56, and these claims are rejected on that basis.

As per claims 58, 62 and 66, Cornell discloses "the at least one character includes at least one of a null character, a comma, and a blank character" (see col. 14, lines 60-66).

Allowable Subject Matter

Claims 31, 33-35, 40, 42-44, 49 and 51-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

II. The submission of the Terminal Disclaimer has overcome the double patenting rejection(s) of claims 28-66. Thus, the rejection(s) has (have) been withdrawn.

Applicant stated that "As conceded by the first Official Action, Cornell does not teach or suggest determining whether data used by a second system corresponds to first switch commands included in a subset of such commands, where correspondence is indicative of the second system being capable of generating second switch command(s) equivalent to a first switch command included in the subset." It is noted that the Office action clearly states "Cornell fails to explicitly disclose determining ... subset." Thus arguments are moot.

Further, the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Thus, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Cornell by determining whether said data used by said second system corresponds to first switch commands included in said subset, wherein a correspondence between said data and said first commands is indicative of the second system being capable of generating at least one second switch command equivalent to first switch command including in said subset as disclosed by Rekieta (see Rekieta Fig. 1a). Such a modification would allow the system of Cornell to provide an efficient system for modifying the GTTs associated with various subsystems in

the AIN (see Rekieta col. 17, lines 54-55), therefore, improving the accuracy and the reliability of the method for analyzing the quality of telecommunications switch command tables.

In response to applicant's argument, page 4, last two paragraphs, that "neither Cornell nor Rekieta, taken individually or in combination, teach or suggest at least the determining step of independent claim 28." The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Cornell fails to explicitly disclose determining whether said data used by said second system corresponds to first switch commands included in said subset, wherein a correspondence between said data and said first commands is indicative of the second system being capable of generating at least one second switch command equivalent to first switch command including in said subset. However, Rekieta discloses determining whether said data used by said second system corresponds to first switch commands included in said subset, wherein a correspondence between said data and said first commands is indicative of the second system being capable of generating at least one second switch command equivalent to first switch command including in said subset (see Rekieta col. 4, lines 38-50). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Cornell by determining whether said data used by said second system corresponds to first switch commands included in said subset, wherein a correspondence between said data and said first commands is indicative of the second system being capable of generating at least one second switch command equivalent to first switch command including in said subset as disclosed by Rekieta (see Rekieta Fig. 1a). Such a modification would allow the system of Cornell to provide an efficient system for modifying the GTTs associated with various subsystems in the AIN (see Rekieta col. 17, lines 54-55), therefore, improving the accuracy and the reliability of the method for analyzing the quality of telecommunications switch command tables.

Applicant stated that neither Cornell nor Rekieta, taken individually or in combination, teach or suggest "comparing first executable switch commands with data used by a second system to generate second executable switch commands" It is noted that Cornell discloses a switch controller sending a first primitive command, including identification data, and then the control complex generates a second command associating with incoming call; see Cornell col. 4, lines 1-30, thus, Cornell discloses the claimed limitations. Therefore, the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

MPEP 2111: During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification" Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In *re Prater*, 162 USPQ 541,550-51 (CCPA 1969). The court found that applicant was advocating ... the impermissible importation of subject matter from the specification into the claim. See also *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definition or otherwise that may be afforded by the written description contained in application's specification.").

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In *re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

CONTACT INFORMATION

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 – 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 – 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

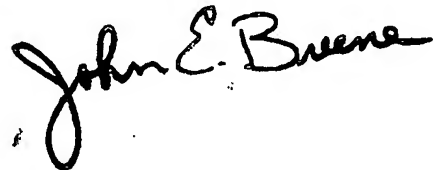


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October 11, 2006



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